

WEAPON 8K S35

SENSOR

SENSOR TYPE HELIUM 35.4 Megapixel CMOS
EFFECTIVE PIXELS 8192 x 4320
SENSOR SIZE 29.90 mm x 15.77 mm (Diagonal: 33.80 mm)
DYNAMIC RANGE 16.5+ stops
SIGNAL-TO-NOISE-RATIO 80 dB

RECORDING

MAX DATA RATES Up to 300 MB/s using RED MINI-MAG (512GB & 1TB)
Up to 225 MB/s using RED MINI-MAG (120GB & 240GB)

REDCODE RAW MAX FRAME RATES 1

60 fps at 8K Full Frame (8192 x 4320), 75 fps at 8K 2.4:1 (8192 x 3456)
60 fps at 7K Full Frame (7168 x 3780), 75 fps at 7K 2.4:1 (7168 x 3024)
75 fps at 6K Full Frame (6144 x 3240), 100 fps at 6K 2.4:1 (6144 x 2592)
96 fps at 5K Full Frame (5120 x 2700), 120 fps at 5K 2.4:1 (5120 x 2160)
120 fps at 4K Full Frame (4096 x 2160), 150 fps at 4K 2.4:1 (4096 x 1728)
150 fps at 3K Full Frame (3072 x 1620), 200 fps at 3K 2.4:1 (3072 x 1296)
240 fps at 2K Full Frame (2048 x 1080), 300 fps at 2K 2.4:1 (2048 x 864)

PLAYBACK FRAME RATES

(PROJECT TIMEBASE) 23.98, 24, 25, 29.97, 47.95, 48, 50, 59.94, 60 fps, all resolutions

REDCODE SETTINGS

RANGE FROM 2:1 UP TO 22:1 1
5:1 REDCODE for 8K Full Frame (8192 x 4320) at 24 fps
12:1 REDCODE for 8K Full Frame (8192 x 4320) at 60 fps
2:1 REDCODE for 4K Full Frame (4096 x 2160) at 24 fps
3:1 REDCODE for 4K Full Frame (4096 x 2160) at 60 fps

REDCODE RAW

ACQUISITION FORMATS 2

8K Full Frame (8192 x 4320), 2:1, 2.4:1, 16:9, 14:9, 3:2, 6:5, 4:1, 8:1, and Ana 2x, 1.3x, 1.25x
7K Full Frame (7168 x 3780), 2:1, 2.4:1, 16:9, 6:5, 4:1, 8:1, and Ana 2x, 1.3x
6K Full Frame (6144 x 3240), 2:1, 2.4:1, 16:9, 3:2, 4:3, 6:5, 4:1, 8:1, and Ana 2x, 1.3x, 1.25x
5K Full Frame (5120 x 2700), 2:1, 2.4:1, 16:9, 6:5, 4:1, 8:1, and Ana 2x, 1.3x
4K Full Frame (4096 x 2160), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, 1:1, and Ana 2x, 1.3x
3K Full Frame (3072 x 1620), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, and Ana 2x, 1.3x
2K Full Frame (2048 x 1080), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, and Ana 2x, 1.3x

APPLE PRORES

422 HQ, 422 and 422 LT at 4K (4096 x 2160) up to 29.97 fps
4444 XQ and 4444 at 2K (2048 x 1080) up to 120 fps
422 HQ, 422 and 422 LT at 2K (2048 x 1080) up to 120 fps

AVID CODECS 3

DNxHR HQX at 4K (4096 × 2160) 12-bit up to 29.97 fps
DNxHR HQ, SQ and LB at 4K (4096 × 2160) 8-bit up to 29.97 fps
DNxHR 444 at 2K (2048 × 1080) 12-bit up to 120 fps
DNxHD 444 and HQX (1920 × 1080) 10-bit up to 120 fps
DNxHD HQ, SQ and LB (1920 × 1080) 8-bit up to 120 fps

GENERAL

CONSTRUCTION Carbon Fiber, Magnesium, and Aluminum Alloy
WEIGHT 3.3 lbs (BRAIN with Integrated Media Bay)
OPERATING TEMPERATURE 0°C to 40°C (32°F to 104°F)
STORAGE TEMPERATURE -20°C to 50°C (-4°F to 122°F)
RELATIVE HUMIDITY 0% to 85% non-condensing

FEATURES

COLOR MANAGEMENT

Supports 33×33×33, 32×32×32, 26×26×26, and 17×17×17 3D LUTs
Variable number of 3D LUT outputs with DSMC2 expander module
User programmable shaper 1D LUTs
Tetrahedral interpolation, 16-bit processing

AUDIO Integrated dual channel digital stereo microphones, uncompressed, 24-bit 48 kHz
Optional 2 additional channels with DSMC2 expander module, uncompressed, 24-bit 48 kHz

REMOTE CONTROL Integrated REDLINK WiFi antenna
Ethernet, RS232, and GPI Trigger with DSMC2 expander module

MONITOR OUTPUTS

3G-SDI (HD-SDI) and HDMI with DSMC2 expander module
1080p RGB or 4:2:2, 720p RGB or 4:2:2
480p RGB or 4:2:2 (HDMI Only)
SMPTE Timecode, HANC Metadata, 24-bit 48 kHz Audio

MONITOR OPTIONS

DSMC2 RED Touch 4.7" LCD, DSMC2 RED Touch 7.0" LCD and DSMC2 RED EVF (OLED) with cable-free connection.
RED Touch 9.0" LCD, RED Touch 7.0" LCD, RED Touch 5.0" LCD, RED PRO 7" LCD, BOMB EVF (OLED) and BOMB EVF (LCOS) compatible with DSMC2 LEMO Adaptor A and LCD/EVF cable.

SOFTWARE

REDCINE-X PRO

DELIVERY FORMATS

4K: DPX, TIFF, OpenEXR (.RED via REncode plugin)
2K: DPX, TIFF, OpenEXR (.RED via REncode plugin)
1080p RGB 4:2:2, 720p 4:2:2 : QuickTime, JPEG, AVID AAF, MXF
1080p 4:2:0, 720p 4:2:0 : H.264, .MP4

VIDEO EDITING SOFTWARE

COMPATIBILITY 4

Adobe Premiere Pro, Avid Media Composer
DaVinci Resolve, Edius Pro, Final Cut Pro, Vegas Pro

WEAPON 8K VV

SENSOR

SENSOR TYPE

RED DRAGON 35.4 Megapixel CMOS

EFFECTIVE PIXELS

8192 x 4320

SENSOR SIZE

40.96 mm x 21.60 mm (Diagonal: 46.31 mm)

DYNAMIC RANGE

16.5+ stops

SIGNAL-TO-NOISE-RATIO

80 dB

RECORDING

MAX DATA RATES

Up to 300 MB/s using RED MINI-MAG (512GB & 1TB)
Up to 225 MB/s using RED MINI-MAG (120GB & 240GB)

REDCODE RAW MAX FRAME RATES 1

60 fps at 8K Full Frame (8192 x 4320), 75 fps at 8K 2.4:1 (8192 x 3456)
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96 fps at 5K Full Frame (5120 x 2700), 120 fps at 5K 2.4:1 (5120 x 2160)
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240 fps at 2K Full Frame (2048 x 1080), 300 fps at 2K 2.4:1 (2048 x 864)

PLAYBACK FRAME RATES

(PROJECT TIMEBASE)

23.98, 24, 25, 29.97, 47.95, 48, 50, 59.94, 60 fps, all resolutions

REDCODE SETTINGS

RANGE FROM 2:1 UP TO 22:1 1

5:1 REDCODE for 8K Full Frame (8192 x 4320) at 24 fps
12:1 REDCODE for 8K Full Frame (8192 x 4320) at 60 fps
2:1 REDCODE for 4K Full Frame (4096 x 2160) at 24 fps
3:1 REDCODE for 4K Full Frame (4096 x 2160) at 60 fps

REDCODE RAW

ACQUISITION FORMATS 2

8K Full Frame (8192 x 4320), 2:1, 2.4:1, 16:9, 14:9, 3:2, 6:5, 4:1, 8:1, and Ana 2x, 1.3x, 1.25x

7K Full Frame (7168 x 3780), 2:1, 2.4:1, 16:9, 6:5, 4:1, 8:1, and Ana 2x, 1.3x

6K Full Frame (6144 x 3240), 2:1, 2.4:1, 16:9, 3:2, 4:3, 6:5, 4:1, 8:1, and Ana 2x, 1.3x, 1.25x

5K Full Frame (5120 x 2700), 2:1, 2.4:1, 16:9, 6:5, 4:1, 8:1, and Ana 2x, 1.3x

4K Full Frame (4096 x 2160), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, 1:1, and Ana 2x, 1.3x

3K Full Frame (3072 x 1620), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, and Ana 2x, 1.3x

2K Full Frame (2048 x 1080), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, and Ana 2x, 1.3x

APPLE PRORES

422 HQ, 422 and 422 LT at 4K (4096 × 2160) up to 29.97 fps

4444 XQ and 4444 at 2K (2048 × 1080) up to 120 fps

422 HQ, 422 and 422 LT at 2K (2048 × 1080) up to 120 fps

AVID CODECS 3

DNxHR HQX at 4K (4096 × 2160) 12-bit up to 29.97 fps

DNxHR HQ, SQ and LB at 4K (4096 × 2160) 8-bit up to 29.97 fps

DNxHR 444 at 2K (2048 × 1080) 12-bit up to 120 fps

DNxHD 444 and HQX (1920 × 1080) 10-bit up to 120 fps

DNxHD HQ, SQ and LB (1920 × 1080) 8-bit up to 120 fps

GENERAL

CONSTRUCTION

Carbon Fiber, Magnesium, and Aluminum Alloy

WEIGHT

3.3 lbs (BRAIN with Integrated Media Bay)

OPERATING TEMPERATURE

0°C to 40°C (32°F to 104°F)

STORAGE TEMPERATURE

-20°C to 50°C (-4°F to 122°F)

RELATIVE HUMIDITY

0% to 85% non-condensing

FEATURES

COLOR MANAGEMENT

Supports 33×33×33, 32×32×32, 26×26×26, and 17×17×17 3D LUTs

Variable number of 3D LUT outputs with DSMC2 expander module

User programmable shaper 1D LUTs

Tetrahedral interpolation, 16-bit processing

AUDIO

Integrated dual channel digital stereo microphones, uncompressed, 24-bit 48 kHz

Optional 2 additional channels with DSMC2 expander module, uncompressed, 24-bit 48 kHz

REMOTE CONTROL

Integrated REDLINK WiFi antenna
Ethernet, RS232, and GPI Trigger with DSMC2 expander module

MONITOR OUTPUTS

3G-SDI (HD-SDI) and HDMI with DSMC2 expander module
1080p RGB or 4:2:2, 720p RGB or 4:2:2
480p RGB or 4:2:2 (HDMI Only)
SMPTE Timecode, HANC Metadata, 24-bit 48 kHz Audio

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VIDEO EDITING SOFTWARE

COMPATIBILITY 4

Adobe Premiere Pro, Avid Media Composer
DaVinci Resolve, Edius Pro, Final Cut Pro, Vegas Pro

WEAPON 8K VV ANA

SENSOR

SENSOR TYPE RED DRAGON 29.0 Megapixel CMOS

EFFECTIVE PIXELS

6720 x 4320 (Spherical)

SENSOR SIZE

33.60 mm x 21.60 mm (Diagonal: 39.94 mm)

DYNAMIC RANGE 16.5+ stops

SIGNAL-TO-NOISE-RATIO 80 dB

RECORDING

MAX DATA RATES

Up to 300 MB/s using RED MINI-MAG (512GB & 1TB)

Up to 225 MB/s using RED MINI-MAG (120GB & 240GB)

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RANGE FROM 2:1 UP TO 22:1 1

4:1 REDCODE for 8K 14:9 (6720 x 4320) at 24 fps

10:1 REDCODE for 8K 14:9 (6720 x 4320) at 60 fps

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REDCODE RAW

ACQUISITION FORMATS 2

8K 14:9 (6720 x 4320), 3:2, 6:5, and Ana 2x, 1.3x

6K Full Frame (6144 x 3240), 2:1, 2.4:1, 16:9, 3:2, 4:3, 6:5, 4:1, 8:1, and Ana 2x, 1.3x, 1.25x

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3K Full Frame (3072 x 1620), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, and Ana 2x, 1.3x

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1080p 4:2:0, 720p 4:2:0 : H.264, .MP4

VIDEO EDITING SOFTWARE

COMPATIBILITY 4

Adobe Premiere Pro, Avid Media Composer

DaVinci Resolve, Edius Pro, Final Cut Pro, Vegas Pro

Tech specs reflect both current and projected information. Everything is subject to change.

1. REDCODE values and max frame rates may vary based on selected acquisition format, aspect ratio, project time base, Lookaround setting, and SSD. For more information on available REDCODE compression settings for all formats, see the [DSMC Media Operation Guide](#).
2. For more information on available acquisition formats, see the [DSMC Operation Guides](#).
3. Avid DNxHD/HR Codecs recording support added to DSMC2 firmware v6.3 or later.
4. Third-party non-linear editing (NLE) applications may have limited compatibility with R3D files.